OIPE JC64
JUL 15 2004
PATENT & TRADEMARK OFFICE

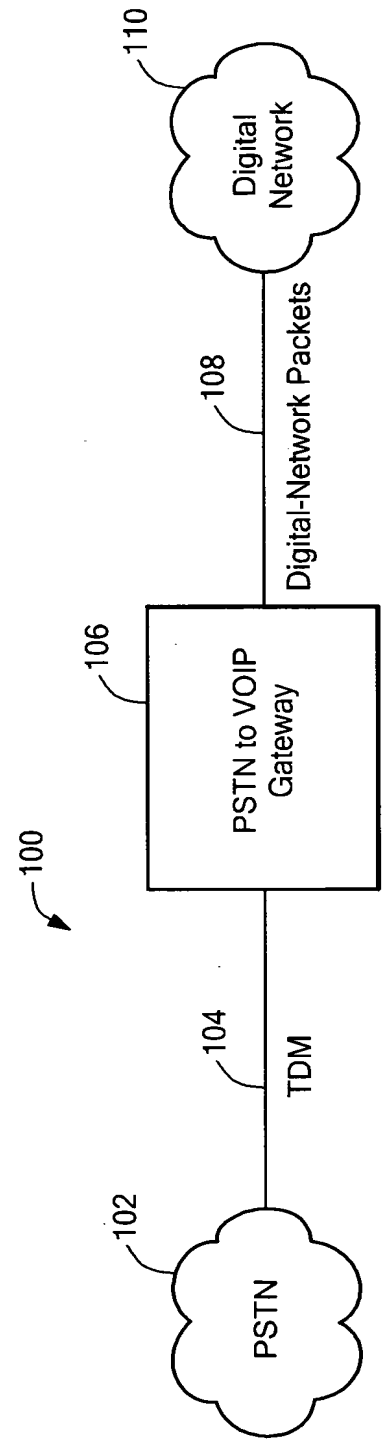

FIG. 1
PRIOR ART

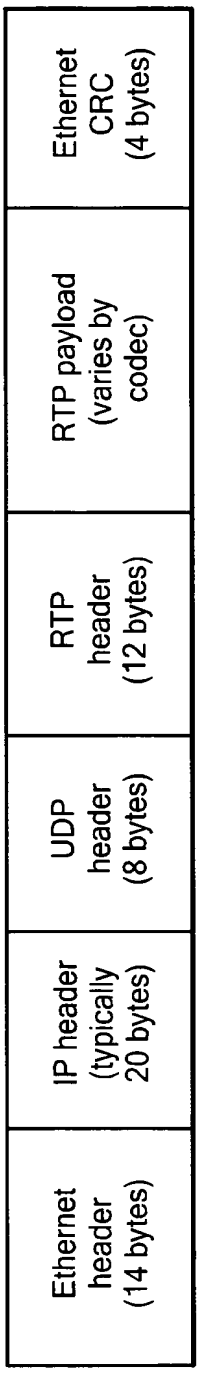

FIG. 2
PRIOR ART

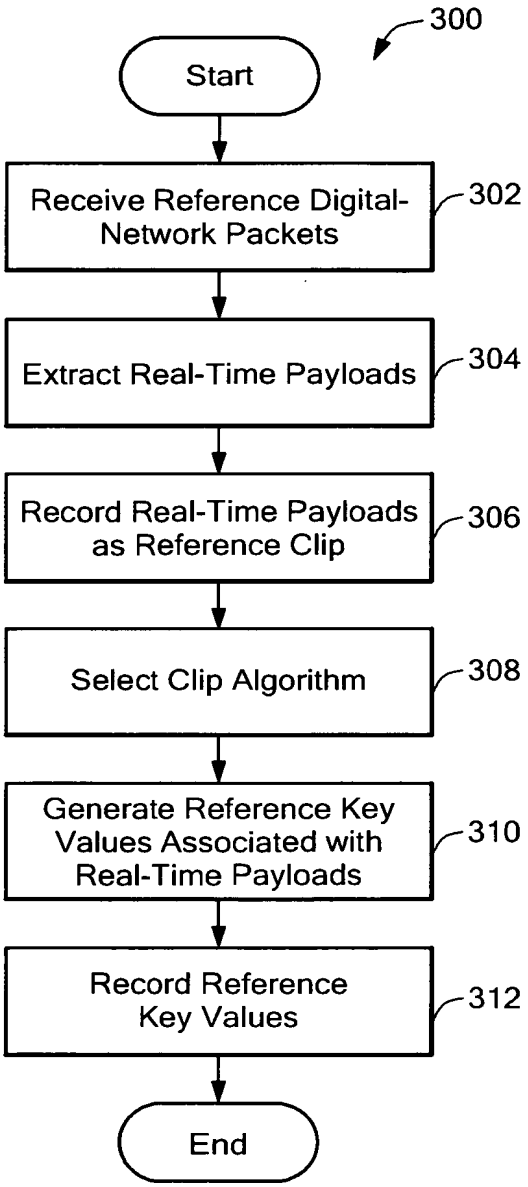
300
Start
Receive Reference Digital-Network Packets
302
Extract Real-Time Payloads
304
Record Real-Time Payloads as Reference Clip
306
Select Clip Algorithm
308
Generate Reference Key Values Associated with Real-Time Payloads
310
Record Reference Key Values
312
End

FIG. 3

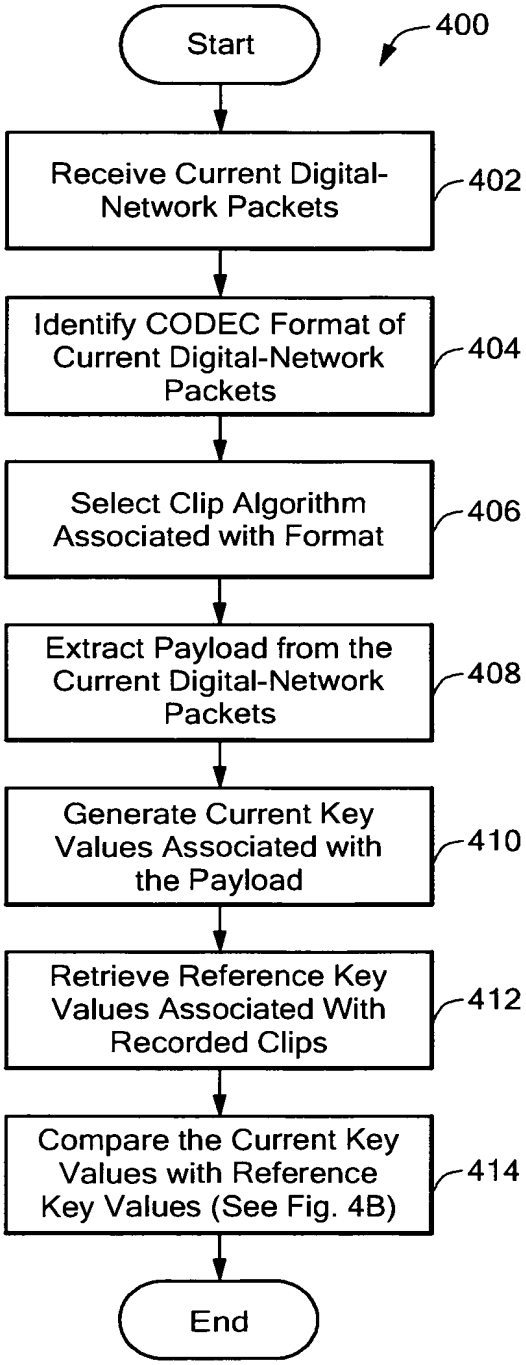
400
Start
Receive Current Digital-Network Packets
402
Identify CODEC Format of Current Digital-Network Packets
404
Select Clip Algorithm Associated with Format
406
Extract Payload from the Current Digital-Network Packets
408
Generate Current Key Values Associated with the Payload
410
Retrieve Reference Key Values Associated With Recorded Clips
412
Compare the Current Key Values with Reference Key Values (See Fig. 4B)
414
End

FIG. 4A

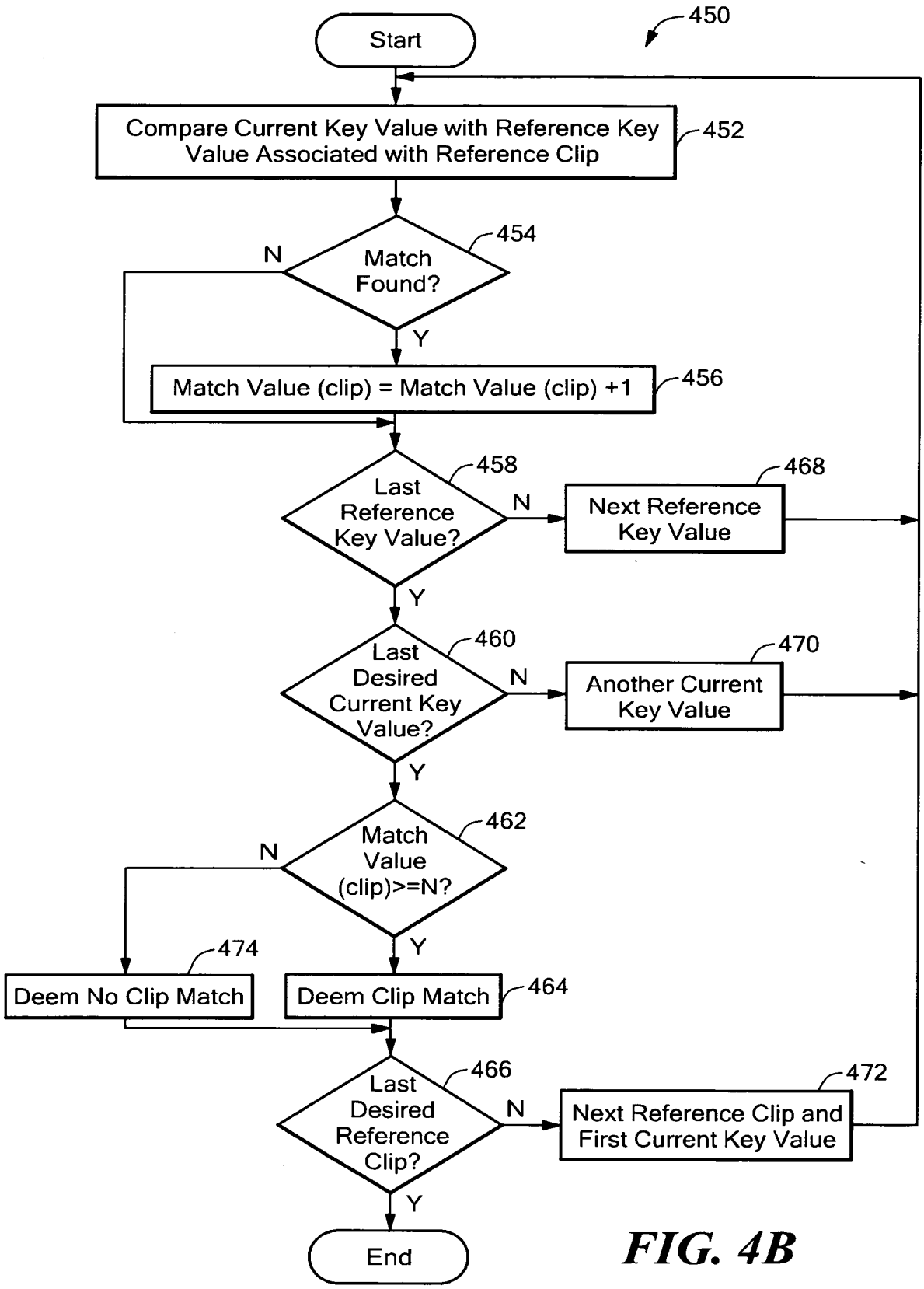
450
Start
Compare Current Key Value with Reference Key Value Associated with Reference Clip
452
Match Found?
454
N
Y
Match Value (clip) = Match Value (clip) +1
456
Last Reference Key Value?
458
N
Next Reference Key Value
468
Y
Last Desired Current Key Value?
460
N
Another Current Key Value
470
Y
Match Value (clip)>=N?
462
N
Y
Deem No Clip Match
474
Deem Clip Match
464
Last Desired Reference Clip?
466
N
Next Reference Clip and First Current Key Value
472
Y
End

FIG. 4B

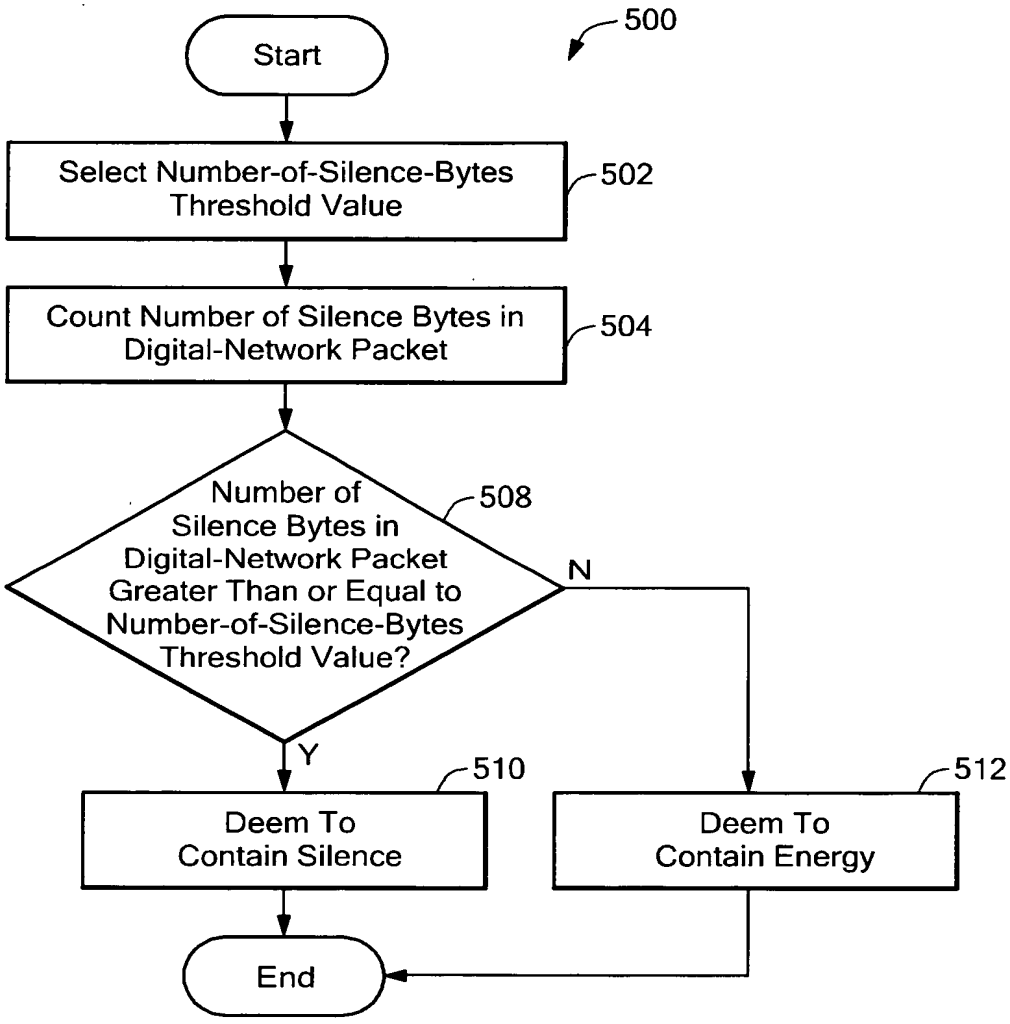
500
Start
Select Number-of-Silence-Bytes Threshold Value
502
Count Number of Silence Bytes in Digital-Network Packet
504
Number of Silence Bytes in Digital-Network Packet Greater Than or Equal to Number-of-Silence-Bytes Threshold Value?
508
N
Y
510
Deem To Contain Silence
512
Deem To Contain Energy
End

FIG. 5A

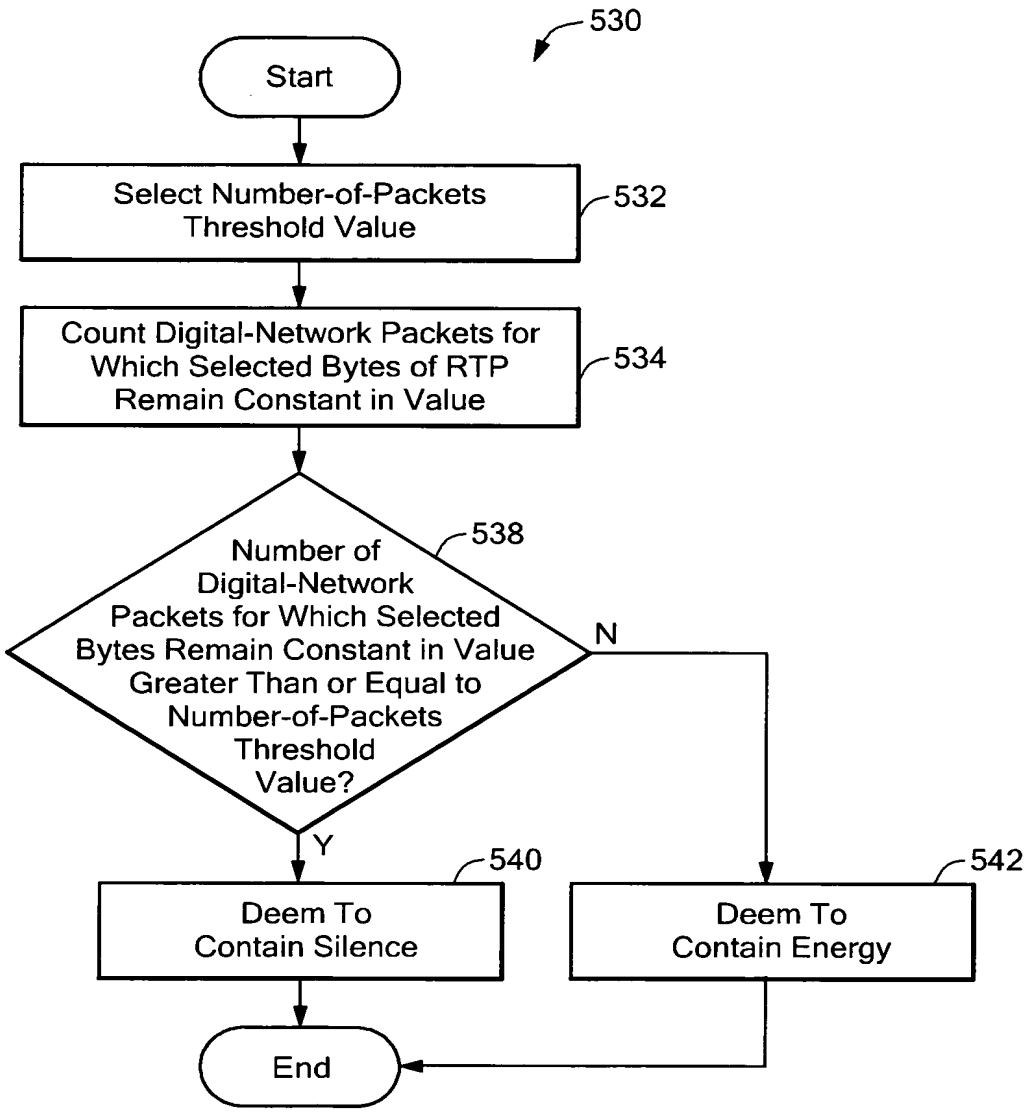
530
Start
Select Number-of-Packets Threshold Value
532
Count Digital-Network Packets for Which Selected Bytes of RTP Remain Constant in Value
534
Number of Digital-Network Packets for Which Selected Bytes Remain Constant in Value Greater Than or Equal to Number-of-Packets Threshold Value?
538
N
Y
Deem To Contain Silence
540
Deem To Contain Energy
542
End

FIG. 5B

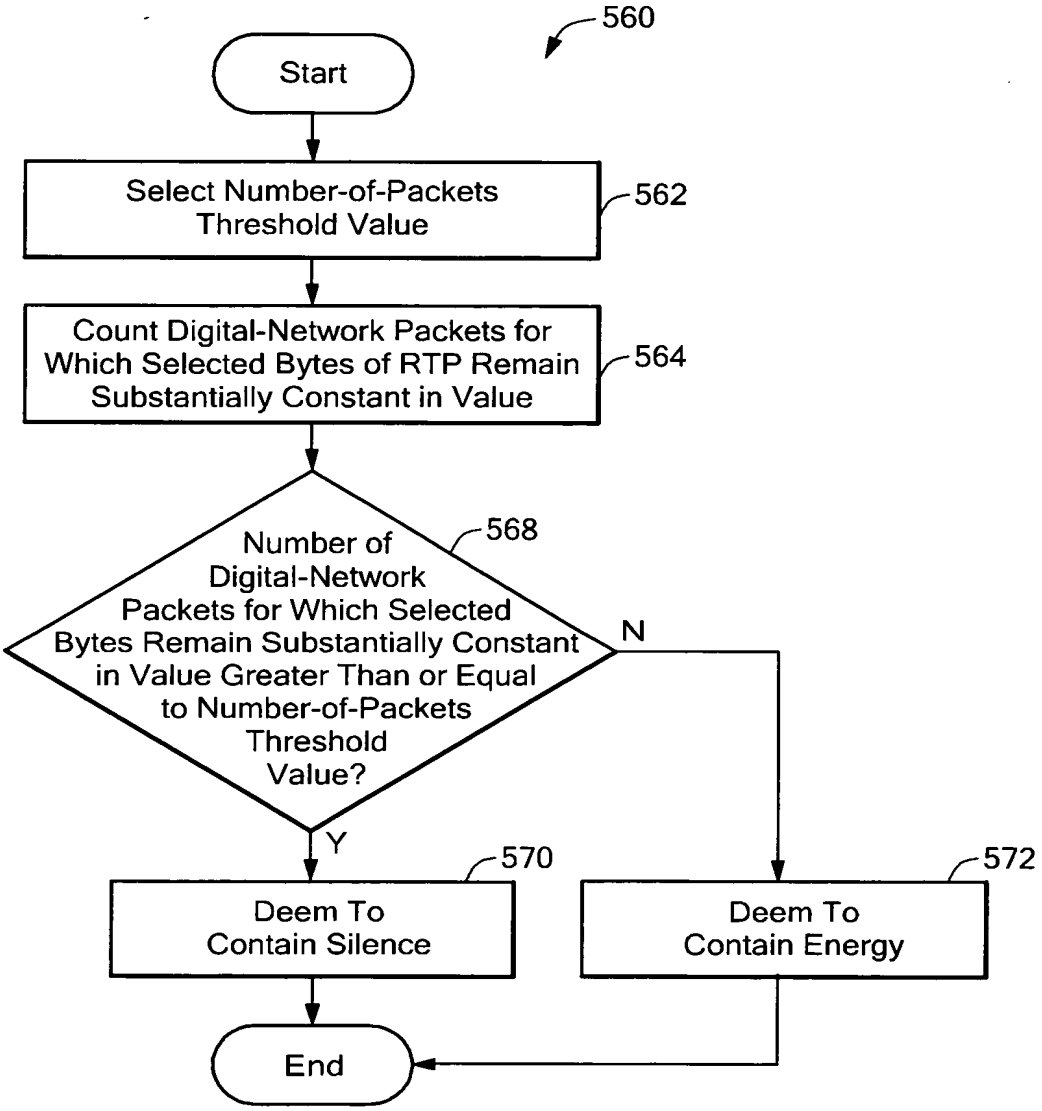
560
Start
Select Number-of-Packets Threshold Value
562
Count Digital-Network Packets for Which Selected Bytes of RTP Remain Substantially Constant in Value
564
Number of Digital-Network Packets for Which Selected Bytes Remain Substantially Constant in Value Greater Than or Equal to Number-of-Packets Threshold Value?
568
N
Y
570
Deem To Contain Silence
572
Deem To Contain Energy
End

FIG. 5C

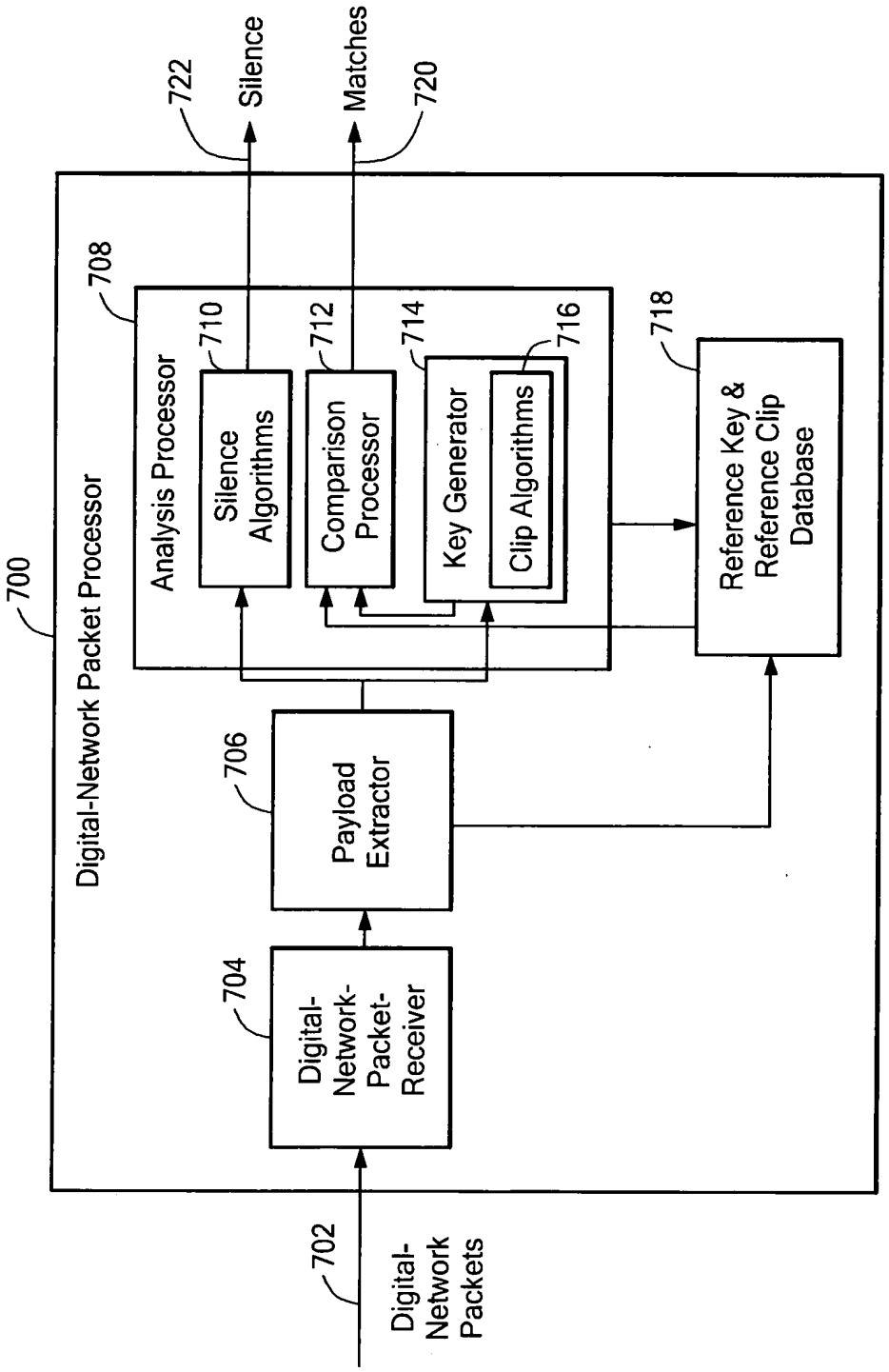
Digital-Network Packets
702
Digital-Network-Packet-Receiver
704
Payload Extractor
706
Digital-Network Packet Processor
700
Analysis Processor
708
Silence Algorithms
710
Comparison Processor
712
Key Generator
714
Clip Algorithms
716
Reference Key & Reference Clip Database
718
Silence
722
Matches
720

FIG. 6